

### **REMARKS**

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 2, 32, and 37 are cancelled.

Claims 43-49 are being added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1, 3-31, 33-36, and 38-49 are now pending in this application.

#### **Priority**

Applicants note that the Office has not acknowledged Applicants' claim for foreign priority. Applicants respectfully request that the Office acknowledge Applicants' claim for foreign priority with the next Office correspondence.

#### **Claim Objections**

Claims 24 and 39 are objected to for containing minor informalities, particularly that "thread" was misspelled. Because claim 24 does not refer to a "thread", it appears that the Office meant to refer to claim 34 instead of claim 24. Claims 34 and 39 have been amended to overcome these objections. Withdrawal of these objections is respectfully requested.

#### **Rejection under 35 U.S.C. § 112**

Claims 1-30 are rejected under 35 U.S.C. § 112, first paragraph for lacking enablement for "plastic articles comprising [at] least one of an ESD layer *and* EMI shielding layer." See Office Action at page 7. Although the Applicant's believe that the disclosure provides enablement for one of skill in the art to provide a plastic article that serves as an

ESD layer and an EMI shielding layer, and that the properties of the plastic article disclosed by the Applicants would be suitable for use in an ESD layer and an EMI shielding layer, Applicants have amended the claims to overcome this rejection. The amendment to claim 1 is not to be understood as excluding plastic articles comprising only one layer that has both ESD and EMI properties. Withdrawal of this rejection is respectfully requested.

**Rejections under 35 U.S.C. § 103**

Claims 1-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,664,971 (hereafter “Soens”) in view of EP 0953651. Claims 1-5, 9-11, 13, 15-17, 21-30, and 36-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,904,980 (hereafter “Rivas”) in view of EP 0953651. These rejections are respectfully traversed.

Amended claim 1 recites “[a] plastic article comprising: at least one of an ESD layer and EMI-shielding layer having a polymer matrix and stainless steel fibers obtained by the bundled drawing of stainless steel wires wherein said stainless steel fibers having an equivalent diameter being more than 0.5μm, said equivalent diameter being less than 100μm, said stainless steel fibers having a composition comprising iron and the following components expressed in percent by weight:  $C \leq 0.05 \%$ ,  $Mn \leq 5\%$ ,  $Si \leq 2 \%$ ,  $8 \leq Ni \leq 12 \%$ ,  $15 \leq Cr \leq 20 \%$ ,  $Mo \leq 3 \%$ ,  $Cu \leq 4 \%$ ,  $N \leq 0.05 \%$ ,  $S \leq 0.03 \%$ ,  $P \leq 0.05 \%$ ; wherein said composition satisfies the following relationship:  $MI = 551 - 462 \times (C \% + N \%) - 9.2 \times Si \% - 20 \times Mn \% - 13.7 \times Cr \% - 29 \times (Ni \% + Cu \%) - 18.5 \times Mo \%$ , said  $MI \leq -40$ .” Claims 31 and 36 include similar language.

The Office admits that Soens and Rivas do not teach the composition recited by claim 1 and relies upon EP 0953651 to disclose a stainless steel composition. See Office Action at pages 3 and 5. Applicants note that EP 0953651 and U.S. Patent No. 6,048,416 (hereafter “Hauser et al.”) are related in that both EP 0953651 and Hauser et al. claim priority to FR 98 05356.

EP 0953651 and Hauser et al. disclose a stainless steel wire. However, neither EP 0953651 or Hauser et al. disclose, teach, or suggest that the stainless steel wire is “obtained

by the bundled drawing of stainless steel wires,” as recited by claim 1. Both EP 0953651 and Hauser et al. disclose the manufacture of single stainless steel wires, not bundles of wires. See abstract of EP 0953651; see Hauser et al. at col. 2, lines 2-11. Therefore, neither EP 0953651 or Hauser et al. disclose all of the limitations of claim 1. Furthermore, it would not have been obvious to modify the teachings of EP 0953651 and Hauser et al. to use bundle-drawn wires because one of ordinary skill in the art would understand that the properties of a single-drawn wire would not correspond to the properties of bundle-drawn wires.

Claims 3, 33, and 38 require an MI value that is “less than -55.” EP 0953651 and Hauser et al. disclose a stainless steel that satisfies the relationship of JM with a value of -55 to -30. Therefore, neither EP 0953651 or Hauser et al. disclose a stainless steel composition that satisfies the relationship of MI, with a value of MI being less than -55, nor does the Office provide a basis or motivation for why one of skill in the art would have found it obvious to modify the compositions disclosed by EP 0953651 and Hauser et al. to satisfy the relationship of MI, with an MI being less than -55. Hauser et al. distinguishes itself from the prior art, which uses high deformations that result in higher martensite content, which causes a sensitivity to wire breaking. See Hauser et al. at col. 1, lines 52-63. Furthermore, applicants note that in col. 6, lines 34-39, Hauser et al. discloses:

The index of JM must be in the interval from -55 to -30. In fact, if JM is lower than -55, the quantity of martensite formed remains low and the tensile strength cannot achieve high values above 2200 MPa, even after final drawing with a cumulative deformation  $\epsilon$  close to 4.5.

Therefore, Hauser et al. teaches away from a composition with that satisfies the relationship of MI, with a value less than -55.

Furthermore, neither EP 0953651 nor Hauser et al. disclose, teach, or suggest that the stainless steel wire may be used with a thread or grain, as cited by claims 31 and 36, respectively. For at least these reasons, withdrawal of this rejection is respectfully requested.

**New Claims 43-49**

Claims 43-49 have been added with the amendment noted above. Claims 43-45 and 49 are supported by Applicants' disclosure. For example, page 6, lines 25-29, of the specification provides support for claims 43-45 and 49. Claim 46 is supported by Applicant's disclosure. For example, Figure 1 shows the deformation  $\epsilon$  as a function of the index MI defined by the composition of the alloy. Figure 1 shows that alloys with MI values less than -60 may be deformed by the illustrated deformation  $\epsilon$  values to attain the strengths of lines 2. Claims 47 and 48 are supported by Applicants' disclosure. For example, Table 1 in the specification provides support for claims 47 and 48.

As noted above, EP 0851039 and Marandel et al. fail to disclose, teach, or suggest the composition of claim 1. As noted above, Hauser et al. and EP 0953651 fail to disclose, teach, or suggest a composition with an MI value less than -55.

Furthermore, Hauser et al. and EP 0953651 fail to disclose, teach, or suggest a composition that undergoes a deformation  $\epsilon$  of at least 4.5 or has an MI value that permits a reduction with a deformation of at least 4.5. As noted above, Hauser et al. distinguishes itself from prior art compositions that use high reductions because these high reductions lead to higher martensite contents and a sensitivity to wire breakage. Hauser et al. discloses that wire deformation  $\epsilon$  should preferably be smaller than 4.5. See Hauser et al. at col. 2, lines 15-53; col. 6, lines 34-38. Hauser et al. also discloses two comparison compositions, C and E, that are drawn with high deformations. See Tables 1 and 2 of Hauser et al. However, these compositions have JM values of -78 and -81, respectively, which are far outside of the range required by Hauser et al. in col. 6, lines 34-38. Furthermore, Hauser et al. shows in Table 2 that compositions C and E are susceptible to breakage when drawn. Therefore, Hauser et al. teaches away from reductions with a deformation  $\epsilon$  of at least 4.5. For at least these reasons, Applicants believe that the newly added claims are allowable over the prior art.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

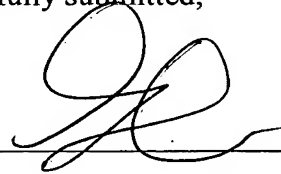
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

11/14/05

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